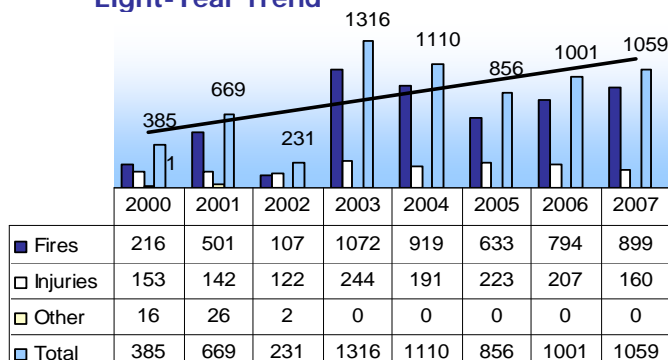


2007 Fireworks Report

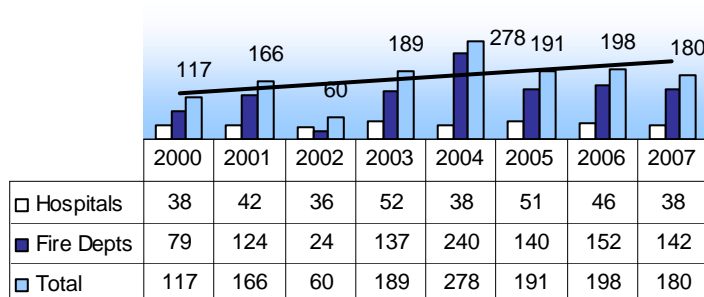
Mission: To implement a comprehensive and effective educational and enforcement program for fireworks injury prevention and fire safety.

There were 1,059 firework-related injuries and/or fires reported to the Office State Fire Marshal in 2007 by fire departments and hospital emergency rooms. This is a 6% increase from the previous year's total of 1001. Of the 1059 reports received, there were 899 fires and 160 injuries. These incidents resulted in \$21.5 million in property loss. This data was collected on paper reports from individual fire departments and hospitals and is supplemented by the National Fire Incident Reporting System (NFIRS) database. Fireworks-related incidents most often occur on July 4th. This has remained constant over the past eight years.

Eight-Year Trend



Agencies Reporting

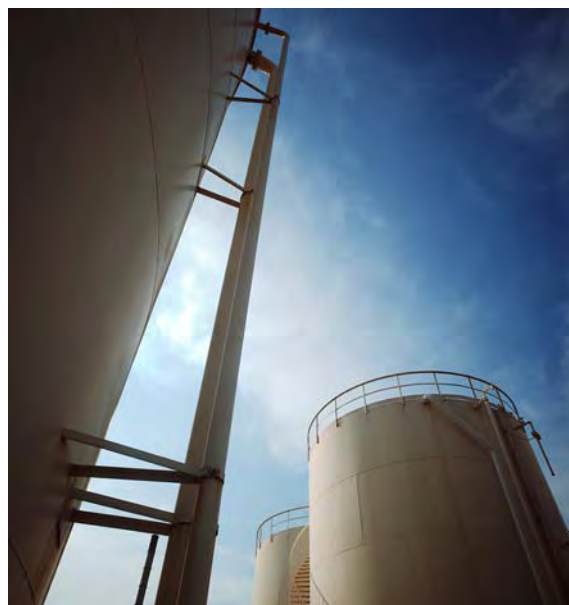


The Cost of Illegal Fireworks

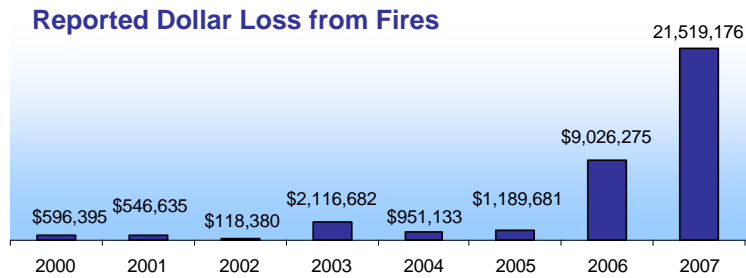
The dollar loss from fireworks-related incidents sharply increased over the past three years. In 2005, the dollar loss from fireworks was \$1.2 million. In 2006, the cost increased to \$9 million, and in 2007 the dollar loss increased to over \$21.5 million.

Twenty million dollars of this loss was from a single incident at the Whitley Fuel Depot in Spokane on July 23, 2007. Bottle rockets, illegal in Washington State, are suspected as the source of ignition.

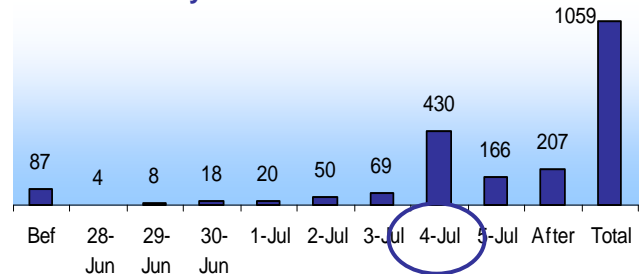
A recent study determined that people in Washington State are aware of the law; however, many choose to disregard it by discharging illegal devices, setting them off in prohibited areas or setting them off outside the legal discharge dates. The Fireworks Public Education Committee is recommending that communities organize combined education and enforcement campaigns to persuade residents to follow the law.



Reported Dollar Loss from Fires



Incidents by Date



In 2007, fireworks-related fires caused an estimated loss of \$21,519,176. Based on the reports received, illegal fireworks were identified as the cause in 48% of the fires and caused 94% of the estimated dollar loss. Legal fireworks were identified in 16% of the reported fires and accounted for 3% of the total loss. The type of fireworks was not identified by the reporting fire department in 63% of the fire incidents (Table #1).

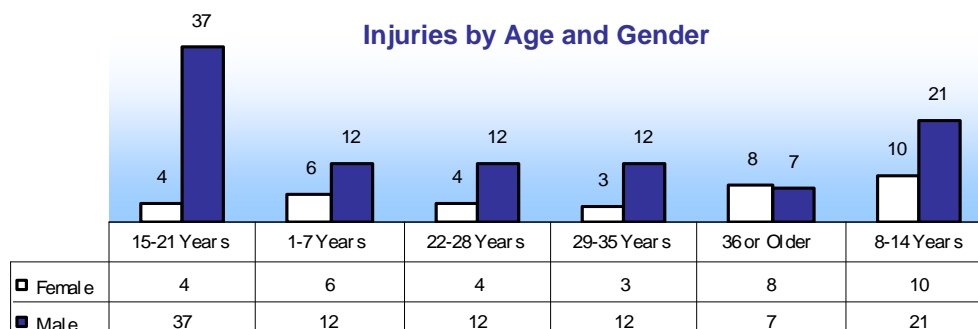
Table #1
Fires by Classification of Fireworks Device

Property Type	Dollar Loss				Number of Fires			
	Illegal	Legal	Unknown	Total	Illegal	Legal	Unknown	Total
Wildland/Vegetation	\$ 14,251	\$ 1,825	\$ 3,200	\$ 19,276	77	71	282	430
Residential	\$ 123,700	\$ 575,000	\$ 270,100	\$ 968,800	16	7	28	51
Commercial	\$ 20,013,750	\$ 750	\$ 500,000	\$ 20,514,500	10	4	24	38
School	\$ -	\$ 100	\$ -	\$ 100	1	1	6	8
Vehicle	\$ 11,000	\$ 3,000	\$ 2,500	\$ 16,500	8	4	19	31
Unknown/Other	\$ -	\$ -	\$ -	\$ -	75	58	208	341
Total	\$ 20,162,701	\$580,675	\$ 775,800	\$ 21,519,176	187	145	567	899

A single commercial fire at the Whitley Fuel Depot caused \$20 million in damage which accounted for 93% of the total loss in 2007. Residential fires accounted for 5% with a total loss of \$968,800. School, wildland fires and vehicles fires each accounted for less than one percent of the total. (Table #1).

Fireworks-related injuries by age and gender show that male youth and young adults are most often injured. There was no adult supervision in 42% of the incidents where supervision was known and children were involved. According to the Center for Disease Control, children are 11 times more likely to be injured by fireworks if they are unsupervised.¹

Injuries by Age and Gender



The type of injury caused most often was burns at 57%. The second leading injury was trauma at 21%. (Table #2).

Table #2									
Injuries by Legal Classification of Fireworks									
Type of Injury					Injury Location				
Type of Injury	Illegal	Legal	Unknown	Total	Place Injured	Illegal	Legal	Unknown	Total
					Arm	2	5	4	11
Amputation	2	1	0	3	Hand	34	19	7	60
First Degree Burn	14	9	6	29	Head or Face	15	16	13	44
Second Degree Burn	15	28	9	52	Leg or Foot	5	4	2	11
Third Degree Burn	5	3	3	11	Multiple Locations	8	3	3	14
Trauma	24	6	4	34	Torso	5	7	3	15
Unknown/Other	11	8	12	31	Unknown	0	0	5	5
Total	71	55	34	160	Total	69	54	37	160

Table #3 shows the types of fireworks devices involved in injury incidents. Illegal fireworks were involved in 70 injury incidents, or 43%, and legal fireworks were responsible for 58 incidents, or 34%.

Of the 58 incidents involving legal devices, multi-aerials caused 28%, followed by sparklers at 17% and third are roman candles at 12% of the incidents.

Illegal devices causing injuries include firecrackers at 23%, bottle rockets at 17%, and public display mortars at 19%. In 2007 there were 12 sparkler bomb incidents. One person was airlifted to Harborview after a sparkler bomb went off prematurely. Fire service personnel should be aware that sparkler bombs are illegal explosive devices and should only be handled by the bomb squad.

As shown in Table #4, the leading cause of fireworks-related injuries is "Holding" at 41 incidents, followed by "Leaning" at 15 incidents and "Tampering" with 13 incidents.

Table #3				
Injuries by Type of Device				
Type of Device	Illegal	Legal	Unknown	Total
Altered Fireworks	3	0	0	3
Bottle Rockets	12	0	0	12
Cones and Fountains	0	4	0	4
Firecrackers and Chasers	16	0	0	16
Ground Spinners	1	6	0	7
Helicopters	0	2	0	2
Homemade Explosive Devices	10	0	0	10
M-80's	3	0	0	3
Missiles and Rockets	9	0	0	9
Multi Aerials	2	16	0	18
Novelties	0	8	0	8
Public Display Mortars	13	0	1	14
Roman Candles	0	7	0	7
Smoke Items	0	1	0	1
Sparklers	0	10	0	10
Unknown	1	4	31	36
Grand Total	70	58	32	160

Table #4	
Cause of Injury	
Holding Fireworks	41
Leaning Over	15
Tampering	13
Throwing Fireworks	12
Unsafe Surface	6
Delayed Ignition	5
Other	68
Grand Total	160

The chart below provides a summary of the reports received in 2007 by county and agency type.

County	Fire Department			Fire District			Hospital		Grand Total
	Fire	Injury	Total	Fire	Injury	Total	Injury	Total	
Adams	0	0	0	1	0	1	1	1	2
Asotin	0	0	0	2	0	2	0	0	2
Benton	11	0	11	1	0	1	2	2	14
Chelan	0	0	0	3	0	3	0	0	3
Clallam	3	0	3	0	0	0	0	0	3
Clark	26	0	26	21	0	21	5	5	52
Columbia	0	0	0	2	0	2	0	0	2
Cowlitz	5	0	5	13	0	13	4	4	22
Douglas	1	0	1	1	0	1	0	0	2
Ferry	0	0	0	1	0	1	0	0	1
Franklin	4	0	4	0	0	0	0	0	4
Grant	4	0	4	5	0	5	6	6	15
Grays Harbor	14	0	14	10	0	10	4	4	28
Island	5	0	5	4	0	4	1	1	10
Jefferson	0	0	0	2	0	2	1	1	3
King	202	3	205	94	2	96	24	24	325
Kitsap	19	0	19	28	1	29	9	9	57
Kittitas	3	0	3	3	0	3	0	0	6
Klickitat	1	0	1	2	0	2	0	0	3
Lewis	2	0	2	4	0	4	9	9	15
Mason	0	0	0	4	0	4	5	5	9
Okanogan	0	0	0	0	0	0	1	1	1
Pacific	3	0	3	0	0	0	0	0	3
Pend Oreille	1	0	1	0	0	0	1	1	2
Pierce	42	1	43	44	1	45	9	9	97
San Juan	0	0	0	1	0	1	0	0	1
Skagit	10	0	10	26	0	26	7	7	43
Skamania	0	0	0	1	0	1	0	0	1
Snohomish	60	2	62	49	2	51	30	30	143
Spokane	25	2	27	17	0	17	3	3	47
Stevens	1	0	1	8	0	8	2	2	11
Thurston	10	0	10	17	1	18	0	0	28
Wahkiakum	0	0	0	1	0	1	0	0	1
Walla Walla	5	0	5	2	0	2	3	3	10
Whatcom	1	0	1	11	1	12	14	14	27
Yakima	24	0	24	39	0	39	3	3	66
Grand Total	482	8	490	417	8	425	144	144	1059

A great way to enjoy fireworks is to attend a public display produced by trained professionals. Their shows are spectacular and safe. There are over 100 professional displays on July 4 in Washington State, and many other Independence Day activities. For more information about fireworks safety, public fireworks displays and the fireworks laws for your area, check the Celebrate Safely website at <http://www.wsp.wa.gov/fireworks/default.htm>

¹ Center for Disease Control, National Center for Injury Prevention and Control, Fireworks-Related Injuries, April 4, 2006, <http://www.cdc.gov/ncipc/factsheets/fworks.htm>.